Building Broadband Infrastructure to Connect the Future

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STATE GOVERNMENT AFFAIRS

CHARTER COMMUNICATIONS



SPECTRUM #1 BROADBAND PROVIDER IN RURAL AREAS



U.S. News and World Report

Best Internet Providers for Rural Areas

U.S. News 360 Reviews takes an unbiased approach to our recommendations. When you use our links to buy products, we may earn a commission but that in no way affects our editorial independence.

By Onjeinika Brooks

July 8, 2021, at 1:00 p.m.

In most urban and densely populated areas of the U.S., broadband internet access is readily available. That's due in part to existing wiring and infrastructure, as well as new construction in expanding cities. But when it comes to Rural America, missing infrastructure can be an Achilles heel, leaving fewer options for households that need fast internet access for school, work, and other activities.

In an increasingly connected world, reliable internet is important for all. However, data collected by the U.S. Census Bureau found 81% of households in rural areas are connected to broadband internet. To help those in less populous areas find the best internet service, we've used our rating for the Best Internet Service Providers of 2021 to create the Best Internet Service Providers for Rural Areas of 2021 rating. Satellite companies HughesNet and Viasat made our list because they're available almost anywhere with a clear view of the sky, but keep reading to see what other options you may have.

Our Best Rural Internet Providers Rating

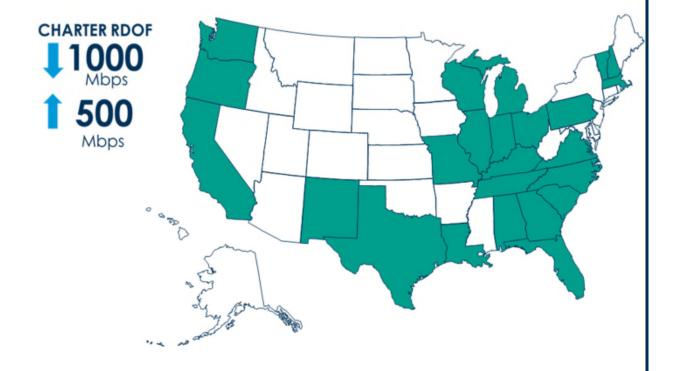
#1 Spectrum Internet

- #2 HughesNet Internet
- **#2** Frontier Internet
- #2 CenturyLink Internet
- **#5** Viasat Internet



POWERING OPPORTUNITY FROM COAST TO COAST

A \$5 Billion Initiative to Connect Unserved Americans to Reliable, High-Speed Broadband



Estimated to reach

1 MILLION

Unserved Homes & Small Businesses *

\$5 BILLION

Total Investment

24States

states

+115,000

Miles of Network Infrastructure

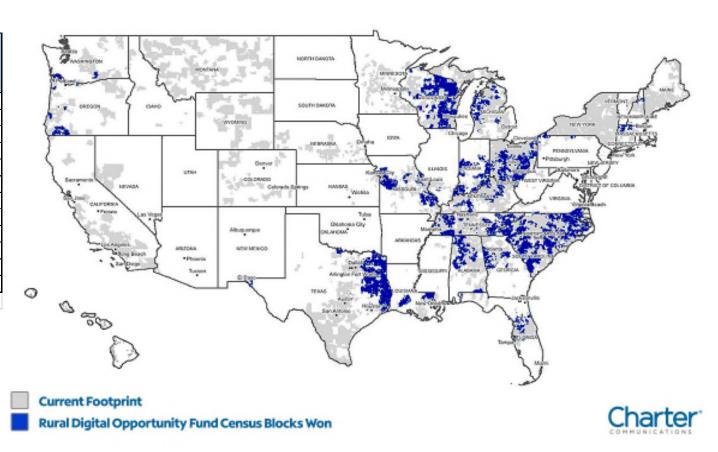
* AS ESTIMATED BY THE FEDERAL COMMUNICATIONS COMMISSION



CHARTER ACROSS THE RURAL U.S.

State	Charter Awarded RDOF Locations*	Total SEARC RDOF Locations*
TX	133,993	310,962
NC	128,509	155,137
SC	98,670	108,833
TN	79,193	155,220
AL	56,451	196,460
KY	31,747	98,909
LA	25,389	175,692
GA	23,854	179,455
FL	17,869	141,625
MS	0	218,990
AR	0	200,612
TOTAL	595,675	1,941,895
* Original FCC estimated locations		

Original FCC estimated locations



Today, Spectrum delivers minimum speeds of at least 200 Mbps in nearly 85% of our footprint and 100 Mbps across the remainder and offers speeds as high as 1 gigabit across virtually our entire national footprint. Charter's RDOF build will be FTTH at speeds of up to 1 gig down, 500 Mbps up.

Over the next seven years or so, Charter will add significant resources to our construction efforts focused solely on adding around

115,000 MILES

OF NETWORK INFRASTRUCTURE









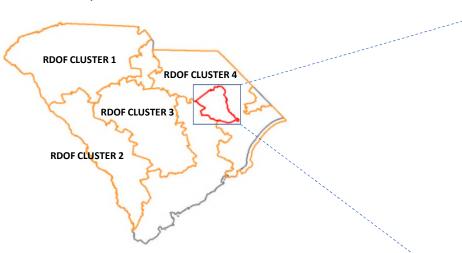


AN EXTENSION LONG ENOUGH TO CIRCLE THE GLOBE

MORE THAN 4.5 TIMES

THE GOAL: FULL BROADBAND ACCESS

FLORENCE, SOUTH CAROLINA EXAMPLE

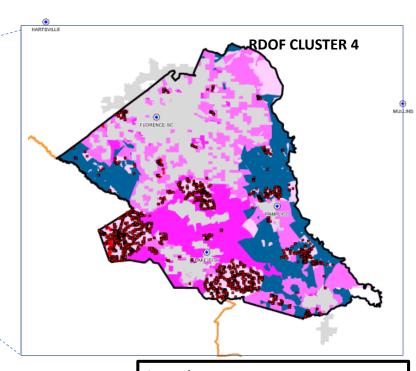




 RDOF Award allocated about \$4.11 Million in funding support for the County. SpaceX was also awarded about 63 RDOF locations.

▶ Gap Analysis showed 3,320 additional unserved locations

- Charter worked with local leaders to do a detailed gap analysis and build cost assessment for the remaining 3,320 locations.
- Created Public-Private Partnership to get to 100% coverage.
 - Partnered with county to use American Rescue Plan and private capital to fund the \$13.8 Million project.

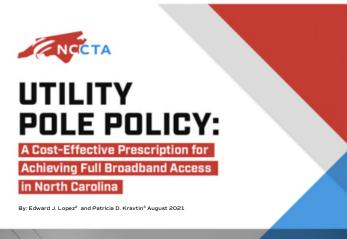


Legend:

- CBGs (Charter awarded)
- CBGs (Other RDOF Winner)
- CBGs (< 25 Mbps Download)
- CBGs (100-999.9 Mbps Download)
- CBGs (>= 1000 Mbps Download)
- Charter Footprint
- RDOF Cluster Boundary
- Florence County
- Underserved Address
- Charter Hub



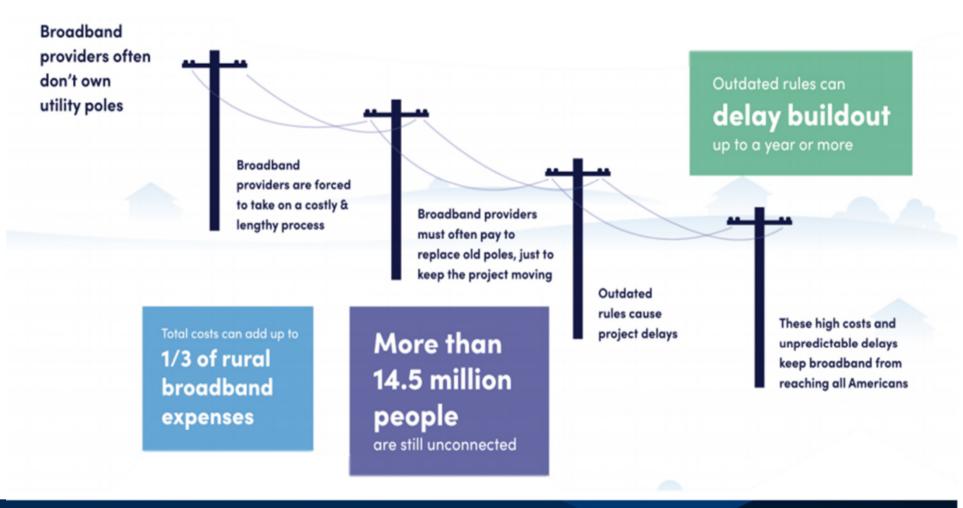
BROADBAND DEPLOYMENT REQUIRES A FAST & FAIR UTILITY POLE ACCESS PROCESS





- The public's return on its broadband investment requires efficient, unimpeded attachment of broadband wires to existing utility pole networks.
- Current policies allow municipal and cooperative electric pole owners to exercise significant <u>market power</u> over pole attachment rates and terms, including onerous timetables and permitting fees, various pre- and post-construction requirements, and <u>full pole replacement</u> as part of the <u>"make-ready"</u> process.
- State and federal grant funds help defray the total cost of broadband expansion but full realization of the federal portion alone would create an estimated \$3.5 billion in new economic gains to North Carolina businesses and households.
- Each month of delayed broadband expansion in North Carolina costs a statewide <u>estimated \$14 to \$16 million of deadweight loss, or simply foregone economic gain</u>.

FULL BROADBAND ACCESS REQUIRES A FAST & FAIR UTILITY POLE ACCESS PROCESS



HELP EXPAND BROADBAND MORE

QUICKLY & EFFICIENTLY

Local Opportunities for Leadership

- Utilize local and county allocated American Rescue Act Infrastructure Funds to partner with broadband providers to accelerate broadband access and adoption
- Focus on removing right-of-way access and timing barriers

> State Legislative Opportunities for Leadership

- Pass legislation to fairly allocate the utility pole replacement cost sharing for make ready
- Update Pole Attachment Laws to align electric coop and muni Electric provider rates and access terms with FCC Rules
- Establish Infrastructure Upgrade Funds to help subsidize upgrading the electric utility poles to better facilitate technology deployments
- Establish guardrails within state broadband grant programs to protect taxpayers by optimizing federal broadband grant award dollars, like RDOF, rather than undercutting them

State Regulatory Opportunities for Leadership

- Fairly allocate the utility pole replacement costs for make ready in state pole attachment tariffs, cost proceedings, and complaints
- Enforce annual pole rate parity and nondiscrimination principals to align IOU, electric coop, and muni electric provider rates and access terms with consistent state and/or FCC Rules
- Lead the effort to resolve pole attachment complaints as fast as practicable!



SUPPORTING ADOPTION EFFORTS

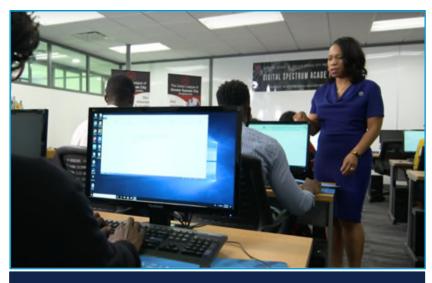
Spectrum Internet Assist



Spectrum Internet Assist (SIA)

Charter's Spectrum Internet Assist (SIA) is available to eligible households across the 41 states we serve. This low-cost broadband option for eligible families and seniors delivers the fastest speeds of any comparable industry offering (30/4 Mbps), which meets and even exceeds the FCC's definition of high-speed broadband.

Spectrum Digital Education Grants



Spectrum Digital Education Grants

As part of its five-year, \$7 million commitment to support digital literacy, Charter this year awarded \$1 million in Spectrum Digital Education Grants to 49 nonprofits across the country which will use the funds for broadband technology programs and training.



LAUNCHING 2021: SPECTRUM COMMUNITY ASSIST



Job Skills Training



Physical Improvements



Broadband Connectivity



In-Kind Contributions

Charter Launched Spectrum Community Assist in the Fall of 2021

- Spectrum Community Assist, is a new philanthropic program to improve the physical condition of community centers in underserved rural and urban communities.
- Charter will offer in-depth partnerships with 100 community organizations to carry out the physical improvements, supported by Charter employee volunteers.
- In addition, philanthropic investments will support new or existing job skills programs offered in these centers.

Program Goals:

100

COMMUNITY CENTERS

50,000

PEOPLE SERVED BY COMMUNITY CENTERS BY 2025



COMMUNICATIONS

THANK YOU

Marva Johnson, Group Vice President, State Govt. Affairs Charter Communications